CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No : CTCE/BBMP/W.No.02/KRIDL/CEMENT/2013-14

Date: 07.03.2014

'TEST' REPORT

CLIENT	:	Asst. Executive Engineer, Yelahanka Subdivision, BBMP, Bangalore.
AGENCY	:	Technical Manager (West), KRIDL, BBMP, Bangalore.
NAME OF THE WORK	:	Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.
REFERENCE	:	BBMP/AEE/YSD/PR/ /201314 Dated:04.06.2014
SAMPLE ID	:	Cement
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-1989
1	a) Initial Setting Time	IS-4031 (Part -5)	195 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	499 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	29.00 %	-

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Job No.: CTCE/BBMP/WNo.02/KRIDL/SAND/2013-14 : 07.03.2014

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Yelahanka Subdivision, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, BBMP, Bangalore.

Name of Work : Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.

Reference : BBMP/AEE/YSD/PR/ /201314 Dated:04.06.2014

Date of Testing : 07.03.2014

Material : Sand Total Wt. of Aggregates in gms 1500

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	85	5.67	5.67	94.3	90-100
2.36	130	8.67	14.33	85.7	75-100
1.18	415	27.67	42.00	58.0	55-90
600 Micron	326	21.73	63.73	36.3	35-59
300 Micron	289	19.27	83.00	17.0	8-30
150 Micron	145	9.67	92.67	7.3	0-10

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Test No: CTCE/BBMP/W No.02/KRIDL/AGG/2013-14 : 10.03.2014

TEST REPORT ON COARSE AGGREGATES

IS 383-1970 (RA- 2002)

Client : Asst. Executive Engineer, Yelahanka Subdivision, BBMP, Bangalore.

Agency : Technical Manager (West), KRIDL, BBMP, Bangalore.

Name of Work : Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.

Reference : BBMP/AEE/YSD/PR/ /201314 Dated:04.06.2014

Date of Testing : 10.03.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms 25500

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	990	3.88	3.88	96.12	95-100
20	12650	49.61	53.49	46.51	30-70
10	8890	34.86	88.35	11.65	10-35
4.75	2574	10.09	98.45	1.55	0-5

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Job No: CTCE/BBMP/W.No.02/KRIDL/AGG/2013-14 : 10.03.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer**, Yelahanka Subdivision, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, BBMP, Bangalore.

Name of Work : Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.

Reference : BBMP/AEE/YSD/PR/ /2013-14 Dated:04.06.2014

Date of Tesing : 10.03.2014

Material : 20mm Aggregates

Total Wt. of Aggregates in gms= 5000

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
40	0	0	0	100	100
20	186	3.7	3.7	96.3	95-100
10	3205	64.1	67.8	32.2	25-55
4.75	1451	29.0	96.8	3.2	0-10

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Job No: CTCE/BBMP/W.No.02/KRIDL/STEEL/2013-14 17.03.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	Asst. Executive Engineer, Yelahanka Subdivision, BBMP, Bangalore.
Agency	:	**Technical Manager (West),** KRIDL, BBMP, Bangalore.
Name of the work	:	Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.
Reference	:	BBMP/AEE/YSD/PR/ /2013-14 Dated:04.06.2014
Date of Test	:	17.03.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	8	0.40	512	547	12.80	O.K	O.K

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Job No.: CTCE/BBMP/W.No.02/KRIDL/STEEL/2013-14 17.03.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	Asst. Executive Engineer, Yelahanka Subdivision, BBMP, Bangalore.
Agency	:	Technical Manager (West), KRIDL, BBMP, Bangalore.
Name of the work	:	Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.
Reference	:	BBMP/AEE/YSD/PR/ /2013-14 Dated:01.06.2014
Date of Test	:	17.03.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	10	0.62	517	550	13.05	O.K	O.K

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Job No: CTCE/BBMP/WNo.02/KRIDL/STEEL/2013-14 17.03.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	Asst. Executive Engineer, Yelahanka Subdivision, BBMP, Bangalore.
Agency	:	Technical Manager (West), KRIDL, BBMP, Bangalore.
Name of the work	:	Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.
Reference	:	BBMP/AEE/YSD/PR/ /2013-14 Dated:04.06.2014
Date of Test	:	17.03.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	12	0.89	522	553	13.35	O.K	O.K

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Job No: CTCE/BBMP/W/No 02/KRIDL/STEEL/2013-14 17.03.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	Asst. Executive Engineer, Yelahanka Subdivision, BBMP, Bangalore.
Agency	:	Technical Manager (West), KRIDL, BBMP, Bangalore.
Name of the work	:	Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.
Reference	:	BBMP/AEE/YSD/PR/ /2013-14 Dated:04.06.2014
Date of Test	:	17.03.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	16	1.58	530	557	13.09	O.K	O.K

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Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No: CTCE/BBMP/W.No.02/KRIDL/BRICKS/2014-15

Date: 02.04.2014

TEST REPORT

CLIENT	:	Asst. Executive Engineer, Yelahanka Subdivision, BBMP, Bangalore.
AGENCY	:	Technical Manager (West), KRIDL, BBMP, Bangalore.
NAME OF THE WORK	:	Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.
REFERENCE	:	BBMP/AEE/YSD/PR/ /201314 Dated:04.06.2014
SAMPLE ID	:	Brick Test
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the samples are as follows:

Sl. No	Description	Test method as per IS Codes	Result	Requirement as per IS 1077-1992 (Rev-5)
1	Compressive Strength Of Bricks	IS 3495-1992 (Part-1)	5.75 N/mm2	Class designation 3.5
2	Water Absorption of Bricks	IS 3495-1992 (Part – 2)	9.80 %	Not more than 20 %
3	Efflorescence of Bricks	IS 3495-1992 (Part – 3)	Moderate	Up to 12.5 Class
4	Dimensional Analysis of Bricks (minimum Sampling is 20 Nos)	IS 1077-1992 (Rev – 5)		
(a)	Measurement of Length in mm		3840 mm	(3800 ± 80 mm)
(b)	Measurement of Width in mm		1835 mm	(1800 ± 40 mm)
(c)	Measurement of Height in mm		1420 mm	(1400 ± 40 mm)

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Job No: CTCE/BBMP/W.No.02/KRIDL/CUBE/2014-15

06.06.2014

TEST REPORT ON CONCRETE CUBES

Client	: Asst. Executive Engineer, Yelahanka Subdivision, BBMP, Bangalore.
Agency	: Technical Manager (West), KRIDL, BBMP, Bangalore
Name of the work	: Construction of Additional class rooms at Kondappa Layout in Ward No.02 of Yelahanka Subdivision, Bangalore.
Reference	: EE/YNKD/W.O/507/2013-14 Dated: 04.03.2014
Sample ID	: RCC Roof Slab Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	09.05.2014	06.06.2014	8.215	485.6	21.58
2	09.05.2014	06.06.2014	8.363	501.3	22.28
3	09.05.2014	06.06.2014	8.412	518.9	23.06

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